


RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES
REPORT OF PROPERTY AND WELL TRANSFER

Field or county Cat Canyon		District: 3 - SANTA MARIA	
Former owner Chevron U.S.A. Inc.		Opcode: C5640	Date: July 19, 2010
Name and location of well(s)			
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><u>Sec. 4, T. 8N, R. 32W S.B. B&M</u> "W.P. Hammon Fee B (NCT-2)" 13 (083-00451)</p> <p><u>Sec. 5, T. 8N, R. 32W S.B. B&M</u> "W.P. Hammon Fee B (NCT-2)" (See attached list)</p> <p><u>Sec. 6, T. 8N, R. 32W S.B. B&M</u> "Los Alamos" (See attached list)</p> <p><u>Sec. 7, T. 8N, R. 32W S.B. B&M</u> "Los Alamos" (See attached list)</p> <p><u>Sec. 18, T. 8N, R. 32W S.B. B&M</u> (Field Santa Barbara Co.) "Los Alamos" 200 (083-20412)</p> <p><u>Sec. 18, T. 9N, R. 32W S.B. B&M</u> "Williams Holding Co." C.H. 1 & C.H.3</p> <p><u>Sec. 30, T. 9N, R. 32W S.B. B&M</u> "Fugler" (See attached list)</p> <p><u>Sec. 31, T. 9N, R. 32W S.B. B&M</u> "Drumm", "D-WF", Gwinn Fee", "Los Alamos", "Williams Holding", "Williams Recruit" (See attached list)</p> </div> <div style="width: 48%;"> <p><u>Sec. 32, T. 9N, R. 32W S.B. B&M</u> "W.P. Hammon Fee B (NCT-1)" 1 & 3</p> <p><u>Sec. 1, T. 8N, R. 33W S.B. B&M</u> "Los Alamos" (See attached list)</p> <p><u>Sec. 12, T. 9N, R. 33W S.B. B&M</u> "G.W.P." (See attached list)</p> <p><u>Sec. 13, T. 9N, R. 33W S.B. B&M</u> "G.W.P." (See attached list)</p> <p><u>Standard" 1 (083-01397)</u> <u>Sec. 23, T. 9N, 33W S.B. B&M</u> "G.W.P." (See attached list), "Palmer Stendel" 66-23 (083-01123)</p> <p><u>Sec. 24, T. 9N, 33W S.B. B&M</u> "G.W.P." (See attached list), "GWP-RF", "Palmer Stendel" 1-24 (083-01151), "WH-GWP-RF" 408 (083-20843)</p> <p><u>Sec. 25, T. 9N, 33W S.B. B&M</u> "G.W.P." 367-24 (083-22114)</p> </div> </div>			
SEE PAGE 2			
Description of the land upon which the well(s) is (are) located Cat Canyon Field, Santa Barbara County, CA			
Date of transfer, sale, assignment, conveyance, or exchange 4-29-2010	New Owner ERG Operating Company, LLC.	Operator code E0255	Type of Organization Corporation
	Address 600 Travis, Suite 7050 Houston, TX 77002		Telephone No. (713) 812-1800
Reported by ERG Operating Company, LLC			
Confirmed by Chevron U.S.A. Inc.			
New operator new status PA	Request Designation of Agent		
Old operator new status PA	Remarks Acquiring company has a blanket bond.		
Deputy Supervisor Patricia A. Abel		Signature 	

OPERATOR STATUS ABBREVIATIONS

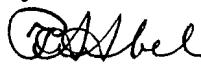
PA - Producing Active	FORM AND RECORD CHECK LIST					
	Form or record	Initials	Date	Form or record	Initials	Date
NPA - No Potential Active	Form OGD121	CB	7/21/10	Map and Book	PA	
PI - Potential Inactive	Well records	CB	7/21/10	Lease Files	CB	7/21/10
NPI - No Potential Inactive	New well cards			Well Stat	CB	
Ab - Abandoned or No More Wells	Bond Status			District Computer Files	CB	7/21/10
PAA:cb	Annual Report	CB	7/21/10			
cc: ERG Operating Co. LLC						
Chevron U.S.A. Inc.						

Santa Barbara County
Cons. Committee - Transfer File - Harold Bertholf - Helen Jan

OGD156 (Modified 1/00)

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RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES
REPORT OF PROPERTY AND WELL TRANSFER

Field or county Cat Canyon		District: 3 - SANTA MARIA	
Former owner Chevron U.S.A. Inc.		Opcode: C5640	Date: July 19, 2010
Name and location of well(s) <u>Sec. 1, T. 8N, R. 33W S.B. B&M</u> "Climax" 1 (083-00380) <u>Sec. 25, T. 9N, R. 33W S.B. B&M</u> "GWP-RF" (See attached list) "Recruit Fee", "WH-F", "WH-GWP", "WH-RF", "Williams Holding", "Williams Holding Co." 1 (083-00729), "Williams Recruit" 2 & 3 (See attached list) <u>Sec. 36, T. 9N, R. 33W S.B. B&M</u> "D-WF" 382 (083-22180), "Los Alamos", "WF-LA" 704-36 (083-21126), "WH-LA" 308 (083-21003) "Williams Fee", "Williams Holding" 368-25 (083-22122) SEE ATTACHED LIST FOR LISTING OF ALL WELLS INCLUDED IN TRANSFER.			
Description of the land upon which the well(s) is (are) located Cat Canyon Field, Santa Barbara County, CA			
Date of transfer, sale, assignment, conveyance, or exchange 4-29-2010	New Owner ERG Operating Company, LLC.	Operator code E0255	Type of Organization Corporation
	Address 600 Travis, Suite 7050 Houston, TX 77002		Telephone No. (713) 812-1800
Reported by ERG Operating Company, LLC.			
Confirmed by Chevron U.S.A. Inc.			
New operator new status PA	Request Designation of Agent		
Old operator new status PA	Remarks Acquiring company has a blanket bond.		
Deputy Supervisor Patricia A. Abel		Signature 	

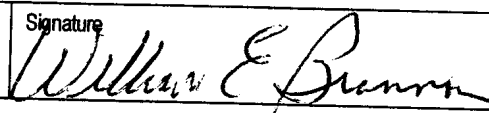
OPERATOR STATUS ABBREVIATIONS

	FORM AND RECORD CHECK LIST					
	Form or record	Initials	Date	Form or record	Initials	Date
PA - Producing Active						
NPA - No Potential Active						
PI - Potential Inactive	Form OGD121	CB		Map and Book		
NPI - No Potential Inactive	Well records	CB		Lease Files	CB	
Ab - Abandoned or No More Wells	New well cards			Well Stat	CB	
PAA:cb	Bond Status			District Computer Files	CB	
cc: ERG Operating Co. LLC	Annual Report	CB				
Chevron U.S.A. Inc.						

Santa Barbara County
Cons. Committee - Transfer File - Harold Bertholf - Helen Jan

OGD156 (Modified 1/00)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES
REPORT OF PROPERTY AND WELL TRANSFER

Field or county See below		District: 3 - SANTA MARIA	
Former owner ChevronTexaco Exploration & Production Company		Opcode:	Date September 23, 2005
Name and location of well(s)			
All Wells			
Description of the land upon which the well(s) is (are) located			
All wells			
Date of transfer, sale, assignment, conveyance, or exchange 7-11-2005	New Owner Chevron U.S.A. Inc.		Operator code C5640
	Address PO Box 1392 Bakersfield, CA 93302		
		Type of Organization Corp.	Telephone No. (661) 654-7065
Reported by ChevronTexaco Exploration & Production Company			
Confirmed by Chevron U.S.A. Inc.			
New operator new status (status abbreviation) PA	Request Designation of Agent		
Old operator new status (status abbreviation) PA	Remarks THIS IS A NAME CHANGE ONLY Includes abandoned wells		
		Deputy Supervisor William E. Brannon	Signature 

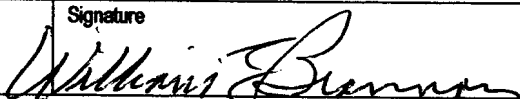
OPERATOR STATUS ABBREVIATIONS

PA - Producing Active	FORM AND RECORD CHECK LIST					
NPA - No Potential Active	Form or record	Initials	Date	Form or record	Initials	Date
PI - Potential Inactive	Form OGD121	W	9/23/05	Map and Book	W	9/23/05
NPI - No Potential Inactive	Well records	W	9/23/05	Lease Files		
Ab - Abandoned or No More Wells	New well cards			Well Stat	W	9/23/05
WEB:hc	Bond Status	W	9/23/05	District Computer Files		
cc: ChevronTexaco E&P Co.						
Chevron U.S.A. Inc.						

Santa Barbara County
Cons. Committee
Harold Bertholf

Transfer File
HQ

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES
REPORT OF PROPERTY AND WELL TRANSFER

Field or county Cat Canyon		District 3 - SANTA MARIA	
Former owner Texaco Exploration & Production Inc.		Opcode: T1600	Date November 22, 2002
Name and location of well(s)			
<u>Sec. 5, T. 8N, R. 32W, SB B&M</u> All Wells	<u>Sec. 7, T. 9N, R. 32W, SB B&M</u> All Wells	<u>Sec. 2, T. 9N, R. 33W, SB B&M</u> All Wells	
<u>Sec. 6, T. 8N, R. 32W, SB B&M</u> All Wells	<u>Sec. 30, T. 9N, R. 32W, SB B&M</u> All Wells	<u>Sec. 3, T. 9, R. 33W, SB B&M</u> All Wells	
<u>Sec. 7, T. 8N, R. 32W, SB B&M</u> All Wells	<u>Sec. 31, T. 9N, R. 32W, SB B&M</u> All Wells	<u>Sec. 10, T. 9N, R. 33W, SB B&M</u> All Wells	
<u>Sec. 16, T. 8N, R. 32W, SB B&M</u> All Wells	<u>Sec. 32 T. 9N, R. 32W, SB B&M</u> All Wells	<u>Sec. 11, T. 9N, R. 33W, SB B&M</u> All Wells	
<u>Sec. 12, T. 8N, R. 33W, SB B&M</u> All Wells	<u>Sec. 1, T. 8N, R. 33W, SB B&M</u> All Wells	<u>Sec. 12, T. 9N, 33W, SB B&M</u> All Wells	
<u>Sec. 6, T. 9N, R. 32W, SB B&M</u> All Wells	<u>Sec. 1, T. 9N, R. 33W, SB B&M</u> All Wells	<u>Sec. 13 T. 9N, R. 33W, SB B&M</u> All Wells	
Description of the land upon which the well(s) is (are) located			
Date of transfer, sale, assignment, conveyance, or exchange 08-22-02	New Owner ChevronTexaco Exploration & Production Company	Operator code C5680	Type of Organization Corp.
	Address 5001 California Ave. Bakersfield, CA 93309		Telephone No. (661) 395-6445
Reported by Texaco Exploration & Production Inc.			
Confirmed by ChevronTexaco Exploration & Production Co.			
New operator new status (status abbreviation) PA	Request Designation of Agent		
Old operator new status (status abbreviation) PA	Remarks		
Deputy Supervisor William E. Brannon		Signature 	

OPERATOR STATUS ABBREVIATIONS

PA - Producing Active		FORM AND RECORD CHECK LIST				
NPA - No Potential Active	Form or record	Initials	Date	Form or record	Initials	Date
PI - Potential Inactive	Form OGD121	PC	11-02	Map and Book	PBA	11-02
NPI - No Potential Inactive	Well records	DM	11-02	Lease Files		
Ab - Abandoned or No More Wells	New well cards	DM	11-02	Well Stat	HCR	
WEB:hc	Bond Status			District Computer Files		
cc: Cons. Committee						
Harold Bertholf						

Texaco E & P Inc.
ChevronTexaco E & P Co.
OGD156 (Modified 1/00)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
(805) 937-7246

REPORT OF WELL ABANDONMENT

T. J. Hurst, Agent
Texaco E&P Inc.
26251 Hwy, 33
Fellows, CA 93224

Santa Maria, California
February 20, 1992

Your report of reabandonment of well "Los Alamos" 31,
A.P.I. No. 083-00313, Section 1, T. 8N, R. 33W, SB B.&M.,
Cat Canyon field, Santa Barbara County,
dated Jan. -, 1992, received Feb. 3, 1992, has been
examined in conjunction with records filed in this office, and we have
determined that all of the requirements of this Division have been
fulfilled.

Date of environmental inspection: February 19, 1992.

RAB:ks

cc: Conservation Committee
Update

K.P. HENDERSON, Acting Chief

By William E. Brannon
Deputy Supervisor

DIVISION OF OIL AND GAS
CHECK LIST - RECORDS RECEIVED AND WELL STATUS

COMPANY TEXACO EXP. & PROD. INC. WELL NO. "LOS ALAMOS" 31
API NO. 083-00313 Sec. 1, T. 8N, R. 33W, SB B.&M.
COUNTY SANTA BARBARA FIELD CAT CANYON

RECORDS RECEIVED

DATE

STATUS

Well Summary (Form OG100) _____
History (Form OG103) 2-03-92
Directional Survey _____
Core Record and/or SWS _____
Other: _____
Electric logs: _____

abd - waterflood 9/10/91
(Date)

Engineer's Check List

☒ Summary, History, & Core Record
☐ Directional Survey
☐ Logs
☒ Operator's Name
☒ Signature
☒ Well Designation
☒ Location _____

☒ Notices
☒ "T" Reports
☒ Casing Record
☒ Plugs
☒ Env. Insp. Date 2/19/92 RS
☐ Production/Injection
☐ E Well on Prod., enter EDP
☐ Computer

Clerical Check List

Form OGD121 2-20-92
☐ Location change (OGD165) _____
☐ Elevation change (OGD165) _____
☒ Final Letter (OG159) 2-20-92
☐ Release of Bond (OGD150) _____
☐ Abd _____ in EDP
☐ Notice of Records Due (OGD170)
☐ Request: _____

☒ Map Work: _____
☐ Follow Up: _____

☐ Hold for: _____

Records Approved 2/3/92 RS

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator TEXACO EXPLORATION & PRODUCTION, INC. Field Cat Canyon County Santa Barbara
Well Los Alamos #31, Sec. 1, T 8N, R 33W, S.B. B. & M.
A.P.I. No. 083-00313 Name W. G. WELCH Title AGENT
Date January, 1992

DIVISION OF OIL AND GAS
RECEIVED

FEB 3 1992

Signature W. Welch

26251 Highway 33, Fellows, CA 93224
(Address)

SANTA MARIA, CA

(805)768-4357
(Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

- 08/29/91 M.I.R.U. Opened well. Unlanded tubing. Attempted to release Packer to no avail. Worked Larkin Mandrel and Baker Loc-Set Packer up to 90,000#. Released packer and worked free. Relanded tubing. Closed well in, shut down.
- 08/30/91 Opened well. Unlanded tubing. Installed BOPE and working floor. Pulled tubing slowly, pulling 40,000# over string weight. Packer stopped at 3,150'. Pumped 100 bbls. water down tubing. Unable to work packer free pulling 70,000#. Change of orders. Closed well in shut down.
- 09/03/91 Opened well. Worked stuck packer assembly loose pulling 90,000#. Pulled out of hole with packer assembly. R.I.H. with 6-1/8" bit, bit sub, four 4-3/4" drill collars, and 2-7/8" tubing. Tagged fill at 3,543'. Junk bridge plug at 3,646'. Rigged up power swivel. Filled hole and circulated out sand from 3,543' to 3,588'. Had to rotate tubing to make hole. Pulled bit to 2,965'. Closed well in shut down.
- 09/04/91 Opened well. R.I.H. Tagged fill at 3,588'. Filled hole and circulated out fill from 3,588' to bridge plug at 3,675'. Drilled up bridge plug. Cleaned out sand from 3,679' to 3,806'. Drilled out cement from 3,806' to bridge plug at 3,834'. Pulled 2' off bridge plug and power swivel quit working. Let hole clean up. Pulled to 2,965'. Lay down power swivel. Closed well in, shut down.
- 09/05/91 Opened well. Made up H&H power swivel. R.I.H. Tagged bridge plug at 3,836'. Drilled down 1' and stopped making hole. P.O.O.H. with tools. Found cone missing from bit. Replaced bit. R.I.H. with tools to 3,837'. Drilled to 3,846'. Getting back cuttings of metal, cement, and gravel. Tubing torquing up badly and hanging up. Let hole clean up. Pulled bit to 2,965'. Closed well in, shut down.
- 09/06/91 Opened well. R.I.H. to 3,846'. Attempted to drill out junk to no avail. D.O.G. approved cement job from 3,846'. Pulled out tubing and lay down drill collars, bit sub, and bit. R.I.H. with sawtooth collar and 2-7/8" tubing to 3,845'. Pumped 130 cu.ft. class "C" cement and displaced to top of cement at 3,257' with 106 cu.ft. water. Pulled tubing to 3,249'. Pumped 130 cu.ft. class "C" cement and displaced to top of cement at 2,661' with 86 cu.ft. water. Pulled tubing to 2,648'. Pumped 130 cu.ft. class "C" cement and displaced to top of cement at 2,060' with 67 cu.ft. water. P.O.O.H. Closed well in, shut down.
- 09/09/91 Opened well. R.I.H. Tagged cement at 1,900'. Lay down excess tubing. Retagged for D.O.G. With tubing at 1,900', pumped in 177 cu.ft. class "C" cement and displaced to top of cement at 1,100' with 36 cu.ft. water. D.O.G. witnessed and approved. Held safety meeting on explosives. Rigged up M.M.I. R.I.H. to 1,070' and fired 30# cavity shot. Rigged down M.M.I. R.I.H. with tubing to 1,100'. Pumped 169 cu.ft. class "C" cement and displaced to top of cement at 335' with 11 cu.ft. water. P.O.O.H. with tubing. Filled hole. Squeezed away 66 cu.ft. with final pressure of 0#. Closed well in, shut down.

OG103(5/85/DWRR/5M)

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MAP NO.	MAP LETTER	BOND NO.	114	121
				2-3 49 K.D.

09/10/91

Opened well. R.I.H. Logged cement at 675'. P.O.O.H. with tubing. Made up 7" mechanical cutter. R.I.H. 35' and cut casing. Lay down cutter. Removed working floor and B.O.P. R.I.H. with tubing and retagged cement at 675' for D.O.G. With tubing at 675', pumped class "C" cement to surface. P.O.O.H. with tubing. Pumped cement between 7" and 13-3/8" casing strings. D.O.G. witnessed and approved. Used a total of 195 cu.ft. cement. Cleaned location. Loaded out equipment. R.D.M.O.

10/10/91

Cut off casing 5' below ground level. Weld on steel plate with well number, section, township, and range. Cleaned location for D.O.G. final approval.

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DIVISION OF OIL AND GAS

(805) 937-7246

REPORT ON OPERATIONS

Wayne G. Welch, Agent
Texaco E&P Inc.
26251 Hwy, 33
Fellows, CA 93224

Santa Maria, California
September 12, 1991

Your operations at well "Los Alamos" 31 API No. 083-00313
Sec. 1, T. 8N, R. 33W, SB B.&M. Cat Canyon Field, in Santa Barbara
County were witnessed on 9-10-91. P. Truocchio, representative
of the supervisor, was present from 1230 to 1330. There were also
present K. Olsen, Abandonment Supervisor.

Present condition of well: 13-3/8" cem. 416'; 7" cem. 5030', c.p. 2760',
3105', 3187', 3264', 3499' & 3605', perf. 3092' WSO, 3104' WSO, 3185' WSO,
3498' WSO & 4862' WSO, perfs. 3123'-3170', 3210'-3247', and 3530'-3565',
cavity shot @ 1070', cut @ 35'; 5-1/2" ld. 5007'-5705', perfs. 5135'-5687'.
Junk: Bridge plug @ 3845'. T.D. 5710'. Plugged w/cem. 3845'-5'±.

The operations were performed for the purpose of plugging the well in the
process of abandonment.

DECISION: THE PLUGGING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED.

sfcc insp 1/24/92 junk on loc RB
2/19/92 clean & levelled ok RB

PAT:mjn

M.G. MEFFERD, State Oil and Gas Supervisor

By William E. Brannon
Deputy Supervisor

**DIVISION OF OIL AND GAS
Cementing/Plugging Memo**

T391-302 *al*

Operator TEPI Well No. Los Alamos 31
 API No. 083-00313 Sec. 1, T. 8N, R. 33W, S. B&M
 Field Cat Canyon, County Santa Barbara. On September 10, 1991,
 Mr./Ms. P. Trucchio, representative of the supervisor, was present from 1230 to 1330.
 There were also present R. Olsen, Abandonment Supervisor

Casing record of well: 13 3/8" cem. 416', 7" cem. 5030', cp. 2760', 3105', 3187',
3264', 3499', 3605', perf. 3092' w.s.o., 3104' w.s.o., 3185' w.s.o., 3498' w.s.o.,
4862' w.s.o., perfs. 3123'-3170', 3210'-3247', and 3530'-3565', cavity shot @

The operations were performed for the purpose of (1) — abandonment
1070', cut @ 35'; 5 1/2" Id. 5007'-5705', perfs. 5135'-5687'. Junk:
 Bridge plug @ 3845'. T.D. 5710'. Plugged w/ cem. 3845'-5'.

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' is approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
									666cf	Ø	1070

Casing/tubing recovered: _____" shot/cut at 1070', _____', _____' pulled fr. _____';

hole in csg @ junk _____" shot/cut at 35', _____', _____' pulled fr. _____'.
 Junk (in hole): BP @ 3845 Couldn't get below 3845'

Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.

"C"

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt./Sample	Date & Time	Engr.
9/6	130	4bg @ 3845	rept by	J Loyd	3249 1/2			
9/6	130	4bg @ 3249	"	"	2648 1/2			
9/6	130	4bg @ 2648	"	"	1900			
9/9	177	4bg @ 1900	1215	PT	1100' calc			
9/9	169	4bg @ 1100'	rept by	K Olsen	675'	all wt	9/10 1230	PT
9/10	195	* 4bg @ 675'	1330	PT	sfc			

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

ON
No. P 391-59
Field Code _____
Area Code _____
New Pool Code _____
Old Pool Code _____

PERMIT TO CONDUCT WELL OPERATIONS

WATER DISPOSAL PROJECT
CENTRAL AREA
SISQUOC FM. (S6-S9 SDS.)

G. Oviatt, Agent
Texaco Producing Inc.
P. O. Box 811
Ventura, CA 93002

Santa Maria, California
March 5, 1991

Your _____ proposal to abandon well "Los Alamos" 31,
A.P.I. No. 083-00313, Section 1, T. 8N, R. 33W, SB B.&M.,
Cat Canyon field, _____ area, _____ pool,
Santa Barbara County, dated 2-25-91, received 2-28-91, has been
examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to Class II 2M requirements is installed and maintained in operating condition at all times.
2. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 70 lbs./cu. ft. and a minimum gel-shear strength (10 min.) of 20 lbs./100 sq. ft.
3. The well is plugged with cement from 5235' to 4762', 4367' to 4267' and from 2320' to 2220'.
4. The cement plug proposed to be placed from 3665' to 3004' extends from 3665' to at least 2992'.
5. Freshwater deposits are protected by squeeze-cementing through perforations or a cavity shot at 1070 feet with at least 55 cu. ft. of cement. In addition, cement fill inside the casing must be to at least 100 feet above the perforations or cavity shot.
6. THIS DIVISION IS NOTIFIED:
 - a. To witness the location and hardness of the cement plugs at 4762', 2992', and at 970'.
 - b. To witness the mudding of the well.
 - c. To witness the placing of the cement plugs from 4367' to 4267' and from 2320' to 2220'.
 - d. To witness the placing of the surface plug and the plug in the 13-3/8" x 7" casing annulus, or to verify their locations.
 - e. To inspect and approve the cleanup of the well site before approval of abandonment will be issued.

NOTE:

1. The 13-3/8" x 7" annulus plug must be placed through macaroni tubing or by perforating the 7" casing at 30', or deeper, and circulating cement up the annulus. An alternative would be to cut and pull the 7" casing from at least 30', prior to placing the surface plug.

9/6
DB/K. Olson: milled up 1st BP, found BP's 30' deep ±. Milling @ 3846, have
made 9' in 12 hrs of milling. Ok to plug (Continued on Page 2)
From 3846' - 2992', DOG to tag

BLANKET BOND
AJK:ks

Engineer Al Koller

Phone (805) 937-7246

M.G. MEFFERD, State Oil and Gas Supervisor

By William E. Brannon
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111

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5

DIVISION OF REVENUE
RECEIVED
FEB 28 1961
SANTA MARIA, CA

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS	
		OGD114	OGD121
	<i>Blanket</i>	<i>2-28-91</i>	<i>2-28-91</i>

42

Texaco Prod. Inc.
(Name of Operator)
By M. A. Carrell
(Print Name)
Steve Carrell 2/23/91
(Signature) (Date)

WELL: Los Alamos #31

DATE:

FIELD: Cat Canyon

AREA: Santa Maria

PROPOSAL: Abandonment

STATUS: Idle

ABANDONMENT PROCEDURE:

1. Transport 5100' 2-7/8" EUE 8rd tubing to location for abandonment string.
2. M.I.R.U. Install B.O.P.E. and function test B.O.P. RIH in attempt to retrieve two bridge plugs at 3,646' and 3,810'.

NOTE: Notify DOG of new E.D. if unable to remove bridge plugs.
3. RIH with sawtooth collar on 2-7/8" tubing in attempt to clean out to E.D. (5,030'). DOG to witness clean out depth.
4. With tubing at clean out depth, pump in 54 bbl abandonment mud from 5,030' to 3,665'. DOG to witness mudding of hole.
5. Pull tubing to 3,665'. Stage in 190 cu.ft. Class G cement with 35% silica flour and 2% CaCl_2 (Theoretical volume 146 cu.ft. from 3,665' to 100' above top of perf's). Wait two hrs.
6. RIH. Tag top of cement plug at 3,004'. If lower recement as necessary. DOG to witness tag.
7. Pull tubing to 2,999', pump in 118 bbl. abandonment mud to surface. (Mud to be 9.4 ppg, YP - 20#). DOG to witness surface plug.
8. Pull tubing to 100'. Pump in 22 cu.ft. Class G 3:1 sand cement slurry to 5' of surface. Fill all surface annuli with cement. DOG to witness surface plug.
9. RDMO. Cut off casing 5' below ground level. Weld on steel plate with well number, section, township, and range.

NOTE: Notify county petroleum department to witness before back-filling.
10. Clean location for DOG final approval.

Los Alamos #31
CAT CANYON

DEPTH: 5,710'

CASING: 13-3/8" 61# 416'
7" 23# Effec. to 3,646' Shoe at 5,030'

LINER: None

PERF'S: JP 4 H's 3185'; 3264'; 3498'; 3606'
Cmt'd 4 H's 3105'; 3187'; 3499'; 3605'
GP 8 hpf 3123' - 3162'
Reperf. JP 4 hpf 3123' - 3162'
Reperf. JP 4 hpf 3130' - 3170'
GP 8 hpf 3211' - 3221'
GP 4 hpf 3221' - 3237' (cmt'd)
Reperf. JP 4 hpf 3210' - 3247'
GP 4 hpf 3530' - 3559'
Reperf. JP 4 hpf 3530' - 3559'

W.S.O.: 4 H's 3,104'

TUBING: None

REMARKS:

Defaco
"Los Alamos" 31

13 1/2 pc. 416

sf.
100

BFW
1020

970

med 1070 CS 59.

2220

2720

need plug

3508

CP 2760

2770

temp.

med

2992 need

3104 W 3092 W 50
CP 3105

3185 W 50 CP 3187

CP 3264

3458 W 50

3499 CP

3530-5165

3605 CP

3606

3102-62 3237-3221 (cem. off)

perf 3210-47, 3130-76

perf 3211-21 (cem. off)

BP 3646 3665

BP 3812 SSX cem. on top

Mont

4367

4267

4367 need plug

med

4862 W 50

4762

5007

7" C. 5030

5135

need plug 5235

5 1/2" id. 5687
5005

SONIC FLUID
LEVEL SUMMARY

COMPANY : TEXACO
AREA : CAT C.

DATE	WELL #	FOP	BFW	F LEVEL	CP	COMMENT
1/6/89	LOS ALAMOS 63	0	1100	1395	1	STATIC TEST
1/6/89	LOS ALAMOS 66	0	1100	1302	1	STATIC TEST
1/6/89	LOS ALAMOS 93	0	960±	465	50	TBG MASKS ACTUAL F.L.?
1/6/89	LOS ALAMOS 73	0	1130	310	0	TBG MASKED ACTUAL F.L.?
1/6/89	LOS ALAMOS 90	0	970	1705	0	STATIC TEST
1/6/89	LOS ALAMOS 72	0	950	1829	130	STATIC TEST
1/6/89	LOS ALAMOS 94	0	980	248	165	INCONCLUSIVE-TBG MASK F.L.
1/6/89	LOS ALAMOS 106	0	1120	124	1	STATIC TEST
1/6/89	LOS ALAMOS 88	0	1100	961	0	STATIC TEST
1/6/89	LOS ALAMOS 20	0	1100±	868	12	STATIC TEST
1/6/89	LOS ALAMOS 23	0	1060	2852	10	STATIC TEST
1/6/89	LOS ALAMOS 64	0	1060	1840	10	STATIC TEST
1/6/89	LOS ALAMOS 8-X	0	1120	2232	600	STATIC TEST
1/6/89	LOS ALAMOS 28	0	1000	80	5	QUESTIONABLE?
1/6/89	LOS ALAMOS 19	0	1080	930	50	STATIC TEST
1/6/89	LOS ALAMOS 27	0	920	3069	75	STATIC TEST
1/6/89	LOS ALAMOS 68	0	850	93	1	STATIC TEST
1/6/89	LOS ALAMOS 104	0	650	310	75	STATIC TEST
1/6/89	LOS ALAMOS 158	0	750	0	140	OIL TO SURFACE
1/6/89	LOS ALAMOS 157	0	980	2760	170	STATIC TEST
1/6/89	LOS ALAMOS 29	0	1160	217	4	STATIC TEST
1/6/89	LOS ALAMOS 31	0	1020	605	12	STATIC TEST
1/6/89	LOS ALAMOS 100	0	710±	527	4	STATIC TEST
1/6/89	LOS ALAMOS 44	0	770	0	30	OIL TO SURFACE
1/6/89	LOS ALAMOS 103	0	660	589	480	STATIC TEST
1/6/89	LOS ALAMOS 52	0	760	0	80	OIL TO SURFACE
1/6/89	LOS ALAMOS 49	0	750	961	235	STATIC TEST
1/6/89	LOS ALAMOS 55	0	770	682	5	STATIC TEST
1/6/89	LOS ALAMOS 53	0	765	0	155	OIL TO SURFACE
1/6/89	LOS ALAMOS W.D.1	0	750	0	310	OIL TO SURFACE
1/6/89	LOS ALAMOS 39	0	690	496	1	STATIC TEST
1/6/89	LOS ALAMOS 71	0	910	31	60	STATIC TEST
1/6/89	LOS ALAMOS 155	0	780	620	35	STATIC
1/6/89	LOS ALAMOS 150	0	740	1612	25	STATIC TEST
1/6/89	LOS ALAMOS 1-7	0	950	0	170	OIL TO SURFACE

DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

301 WEST CHURCH STREET, P. O. BOX 227

SANTA MARIA, CALIFORNIA 93456

(805) 925-2686



December 17, 1986

James M. Newton, Agent
Texaco Producing Inc.
3201 Skyway Drive, #201
Santa Maria, CA 93455

WATERFLOOD PROJECT
CAT CANYON FIELD
CENTRAL AREA
SISQUOC FM. (S₆-S₉ SDS)

Dear Mr. Newton:

Current Division policy is to rescind approval for an injection project that has been idle for two years or more. Reactivation of such a project may require a full project-application review.

The above-captioned project has been idle for more than two years and injection approval is hereby terminated. In addition, the Division's approvals for you to inject into wells "Los Alamos" 31, 53, 55, 86, 100, 102, 103, 104, 107, and 108, the only wells in the project, are to be considered terminated as of this date. all injection lines to the wells must be disconnected and the wells properly shut in by January 20, 1987.

If you wish to reactivate this project, this office must be contacted for a determination of requirements.

Yours truly,

K. P. Henderson
Deputy Supervisor

AJK:ks

cc: Well files
Shayne

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
(805) 925-2686

Report on Operations

No. T 376-307

Mr. D. R. Greene, Agent
Getty Oil Company
P. O. Box 811
Ventura, CA 93001

Santa Maria, Calif.
October 5, 1976

Dear Sir:

Operations at well No. "Los Alamos" 31, API No. (083-00313), Sec. 1, T. 8N, R. 33W,
S.B. B & M. Cat Canyon Field, in Santa Barbara County, were witnessed
on 9-28-76. Mr. R. Thomas, representative of the supervisor was
present from 0830 to 1000. There were also present Norm Morgan, engineer aide
and Hugh Perry, tester

Present condition of well: 13 3/8" cem. 416'; 7" cem. 5030', c.p. 2760', perf. 3104'
WSO, perfs. 3123-3170', 3210-3247', & 3530-3565'. T.D. 5710'. Bridge plug 3646'.

The operations were performed for the purpose of demonstrating that all of the injected
fluid is entering the intended zone.

DECISION: THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT
ALL OF THE INJECTION FLUID IS ENTERING THE FORMATIONS BELOW 3211' AT THIS
TIME.

RT:mjn

HAROLD W. BERTHOLF
~~XXXXXXXXXXXXXXXXXXXX~~
State Oil and Gas Supervisor

By

[Signature]

Deputy

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DIVISION OF OIL AND GAS
WATER SHUT-OFF TEST

T 376-307 JK 8

R/A, Temp Survey Water Shut-Off Test

Operator Getty Oil Co.

Well No. "Los Alamos" 31 Sec. 1, T. 8N, R. 33W, SB B&M

Field Cat Canyon, County Santa Barbara was tested for water shut-off on Sept 28, 1976, Mr. R. Thomas, representative of the supervisor was present from 0830 to 1000. There were also present

Norm Morgan, Engr. Aid. & Hugh Penny, Tester.

Casing record of well: 13 3/4" cem 416', 2" cem 5030', cp. 2260', perf 3104' WSO, perfs 3123'-3170', 3210'-3247', & 3530'-3565'. T.D. 5710'. Bridge plug 3646'.

The operations were performed for the purpose of demonstrating that all of the injected fluid is entering the intended zone.

- ☐ The _____" shut-off at _____' is approved.
- ☐ The operations as witnessed and reported are approved and indicate that no fluid has access to the well from the annulus between _____" and _____" casings.
- ☒ The operations as witnessed and reported are approved as indicating that all of the injection fluid is ~~confined to the~~ entering formations below 3211' at this time.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Depth or interval tested 3160'-3570'

The hole fluid was bailed to _____' at _____ on _____ 19____.

The hole was open to _____' for test.

Packer(s) _____' & _____' Tail _____' Bean size _____" Cushion _____

IHP _____ IFP _____ FFP _____ FHP _____

Blow _____

Open for test _____ Hr. _____ min. Fluid entry _____

Date _____ 19____ Time _____ Guage/meter reading _____ Pump depth _____' Engr. _____

Date _____ 19____ Time _____ Guage/meter reading _____ Engr. _____

Fluid level _____' surveyed on _____ 19____, reviewed (witnessed) by _____

Total fluid produced, Bbls. _____ Net oil _____ Water _____

Rate: _____ B/D oil, _____ B/D water, _____ % water cut

RA/Spinner (Temperature) survey run at 480 B/D & 1200 psi on September 28, 1976, fluid confined below 3211' (Packer depth mandrel - 3191')

Run temp survey to P.V. @ 3570'. Run Drop check 3100'-3200' 426 B/D. Run top perf and packer check @ 3160' wait 300 sec log down to 3230' OK. Drop check ran 900'-1000' 490 B/D. V.C. run @ 92' OK.

35

Note: casing pressure 1200#. GO man was injured in removing pressure gage from casing valve. He did not close in casing before removing.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 374-100

Mr. G. C. Padgett, Agent
Getty Oil Company
P. O. Box 811
Ventura, CA 93301

Santa Maria, Calif.
February 27, 1974

DEAR SIR:

Operations at well No. "Los Alamos" 31, API No. (083-00313), Sec. 1, T8N, R. 33W,
S.B. B & M. Cat Canyon Field, in Santa Barbara County, were witnessed
on 2-25-74 by Mr. M. Schrecongost, representative of the supervisor was
present from 1345 to 1530. There were also present G. Hampton, logging engineer
and R. Curnow, production foreman

Present condition of well: 13 3/8" cem. 416', 7" cem. 5030', c.p. 2760', perf. 3104'
WSO, perfs. @ int. 3123-3170', 3210-3247' & 3530-3565', T.D. 5710'. Bridge plug
3646'.

The operations were performed for the purpose of demonstrating that the injected fluid is
entering the intended zone.

DECISION: **THE OPERATIONS AS WITNESSED AND REPORTED ARE NOT APPROVED AS INDICATING
THAT ALL OF THE INJECTION FLUID IS CONFINED TO THE FORMATIONS BELOW 3123'
AT THIS TIME.**

Bob Zolbert

Re-surveyed 4-24-74

- 1. Did not log out to check leak at 1800'*
- 2. Did compute rates at 500' (1000 B/D) and 3100' (checked). Concluded no loss.*

MS:mjn

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By *[Signature]* Deputy

34

R/A

Water Shut-Off Test

T374-100

JR

Operator Getty Oil CoWell No. "Los Alamos" 31Field Cat CanyonSec. 1, T. 8N, R. 33W, S. B B&Mshut-off on 2-25-74, Mr. M. Schrecongost was tested for water present from 1345 to 1530. There were also present G. Hampton, logging engr & R. Curnew, P.F.Casing record of well: 13 3/8" cem. 416'; 7" cem 5030'; c.p. 2760'; perf 3104' WSO, perfs @ int. 3123'-3170', 3210'-3247' & 3530'-3565'. T.D. 5710'. Bridge plug 3646'The operations were performed for the purpose of demonstrating that the injected fluid is entering the intended zone☐ The _____ " shut-off at _____' is approved.☐ The operations as witnessed and reported are approved and indicate that no fluid has access to the well from the annulus between _____" and _____" casings.☒ The operations as witnessed and reported are ^{Not} approved as indicating that all of the injection fluid is confined to the formations below 3123' at this time.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented		Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus Casing			

Depth or interval tested _____

The hole fluid was bailed to _____' at _____ on _____ 19 ____.

The hole was open to _____' for test.

Packer(s) _____' & _____' Tail _____' Bean size _____" Cushion _____

IHP _____ IFP _____ FFP _____ FHP _____

Blow _____

Open for test _____ Hr. _____ min. Fluid entry _____

Date _____ 19 ____ Time _____ Guage/meter reading _____ Pump depth _____' Engr. _____

Date _____ 19 ____ Time _____ Guage/meter reading _____ Engr. _____

Fluid level _____' surveyed on _____ 19 ____, reviewed (witnessed) by _____

Total fluid produced, Bbls. _____ Net oil _____ Water _____

Rate: _____ B/D oil, _____ B/D water, _____ % water cut

RA/Spinner (Temperature) survey run at _____ ? B/D & 600 psi on 2-26 1974, fluid confined below _____' (Packer depth _____')P.U. 3257' Inj liquid in 1 1/4 x 2 1/8" annulus wait @ 1000' - slug goes away at ±1400'no base of slug above or below 1400 - just goes away @ 1400 ±conclude: leak in 2 7/8" /bg through 7" casing at ±1400'

56

3123'

3170'

3180'

3185'

3210'

56a

3247'

Lok set PKR

3260'

3530'

59

3565'

3646 bridge plug

5030

2 1/8"

1"

Larkin Cup mandrel

32

Operator Getty Oil Co.Well No. "Los Alamos" 31Field Cat Canyon, County Santa Barbara, Sec. , T. , R. B&Mshut-off on 12-18-73, Mr. M. Schrecongost, representative of the supervisor was present from 1045 to . There were also present G. Hampton, Logging Engr.Casing record of well: 13 3/8" cem. 416'; 7" cem 5030'; C.P. 2760'; Perf 3104' WSO,
perfs 3185, 3264, 3498' & 3606' cem. off. perfs 3123-3170', 3210-3247' & 3530-3565'
T.D. 5710' Bridge plugs 3646' & 3810'The operations were performed for the purpose of demonstrating that the injected fluid
is entering the intended zone.☐ The " shut-off at ' is approved.☐ The operations as witnessed and reported are approved and indicate that no fluid has access to the well from the annulus between " and " casings.☐ The operations as witnessed and reported are approved as indicating that all of the injection fluid is ^{entering} ~~contained~~ to the formations below ' at this time.Hole size: " fr. ' to ', " to ' & " to '

Casing				Cemented		Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing		

Depth or interval tested The hole fluid was bailed to ' at on 19 .The hole was open to ' for test.Packer(s) ' & ' Tail ' Bean size " Cushion IHP IFP FFP FHP Blow Open for test Hr. min. Fluid entry Date 19 Time Gauge/meter reading Pump depth ' Engr. Date 19 Time Gauge/meter reading Engr. Fluid level ' surveyed on 19 , reviewed (witnessed) by Total fluid produced, Bbls. Net oil Water Rate: B/D oil, B/D water, % water cutRA/Springer (Temperature) survey run at B/D & psi on 12-18 1973,fluid confined below ' (Packer depth 3180-85')1/4" seating nipple @ 3257' inj into S-9 1/4" x 2 7/8" annulus w/cnf mandrel @ 3185' inj into S-6A2 7/8" x 7" annulus inj into S-6 w/perfs 3123-3170'

MAP & BOOK

Getty Oil Co.
"Los Alamos" 31

STATUS

Completed Producing _____
Recompleted Producing _____
Completed Abandoned _____
Uncompleted Abandoned _____
Idle _____

Converted to water disposal well May 2, 1965

*Status changed
to water flood 1-1-67*

RECORDS

Received _____ Needed _____

_____ Well Summary _____
_____ History _____
_____ Log & Core _____
_____ Lge _____ Sm Elec Log(s) _____ Lge _____ Sm _____
_____ Direct. Survey _____
_____ Other _____

Location _____
Elevation _____
Release bond _____
Hold bond _____ Reason _____
Final letter _____
150b _____
170 _____
121 _____
Card _____

ENGINEERS

1. Log, history & core record (dupl) _____
2. Electric log _____
3. Operator name & well designation _____
4. Location _____
5. Elevation _____
6. Signature _____
7. Notices _____
8. "T" reports _____
9. Casing record _____
10. Plugs _____
11. Production _____
12. Wildcat cards _____
13. Map and Book 11-20-65
14. Surface Inspection _____

APPROVED ☒ NOT APPROVED FOR THE FOLLOW-

ING REASON OK

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED

DIVISION OF OIL AND GAS

DEC 16 1965

History of Oil or Gas Well

OPERATOR Getty Tidewater Oil Company FIELD Cat Canyon SANTA MARIA, CALIFORNIA
 Well No. Getty Oil Co.'s Los Alamos #31 Sec. 1, T. 8N, R. 33W, S.B. B. & M.
 Date December 9, 1965, 19____ Signed T. A. Davis
P. O. Box 1206, Santa Maria WA5-8615 Title Agent
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

4/15/65 G&O moved in and rigged up to recomplete as water injection well. Ran 6 1/4" Tricone bit on 2 7/8" tubing, hit fill at 3120'. Circulating out oil.
 4/16 Circulated out sand fill 3120-3175'. Cleaning out bridge plug with Baker sand line drill.
 4/17 With Baker Sand line drill, drilled out Model K retainer at 3175'. Pulled out. Ran Cavins 2 5/8" bailer and bailed sand and gravel at 3185'.
 4/18 Ran sawtooth collar at 3185'. Backscuttled sand and gravel to 3214'. Had indications of bad pipe. Worked pipe. Unable to get past 3214'. Ran 5 1/2" impression block to 3214' and pulled out. Found chips off outside edge of impression block. Perfs. at 3123-3162'; 3211-3237', and 3530-3559'.
 4/19 Idle.
 4/20 Ran Servco 6" mill and milled 3202-3226'.
 4/21 Pulled mill. Ran sawtooth collar and cleaned out sand and cement 3226-3236'. Ran 6 1/4" Security bit and cleaned out cement, sand and gravel to 3260'.
 4/22 Drilled out cement, sand and gravel 3260-3412'. Drilled on cast iron baffle. Pulled out. Running Globe Tricone bit.
 4/23 Drilled out cast iron baffle at 3412'. Cleaned out sand and cement to 3570'. Made up and ran 7" casing scraper to 3570'. Pulled out. Prep. to wash perforations.
 4/24 Ran washer, did not work. Pulled out and checked. Ran back in, still would not work. Pulling out.
 4/25 Ran and set washer at 3570'. Pulled to 3559' to wash perforations 3559-3530' and 3237-3211'. Unable to break down. Pulled washer. Ran in to 3559' and dumped in 500 gallons of acid. Worked washer from 3559-3530'. Had small breakdown. Shut down at 3:00 A.M. Back in at 8:00 A.M. Acid soaking for 8 hours.
 4/26 No report.

Map No.	Map Letter	Bond No.	Farms		
			115	114	121
					12-10-65 58

29

4/27/65 With Lane Wells equipment J.P'd four 1/2" h/ft 3565-3530';
 3247-3210'; 3170-3130'. Ran M&T washer; stuck tool. Pulled with
 80,000# to free tool. Pulled out. Ran M&T circulating washer and
 washed perforations 3130-3247'. Unable to wash lower perforations
 due to fill at 3500'. Pulled out. Running sawtooth collar to
 circulate out sand.

4/28 Ran sawtooth collar and backscuttled sand 3500-3579'. Pulled out.
 Ran M&T washer and washed perforations 3530-3567'. Pulled washer.
 Closed well in at 9:00 P.M.

4/29 Ran bailer, open to 3570'. Laid down tubing. Tore out equipment.

4/30 Company hoist laid waste water line. Hooking up Triplex pump to test
 for water injection.

5/1 Hooked up Triplex pump. Injected 75 bbls./hour at 300 psi. In
 4 1/2 hours injected 340 barrels.

5/2 Injecting 1000 barrels waste water per day at 50 bbls. per hour
 pumping rate; 50 psi at well.

FINAL REPORT.

Casing Record

13 3/8" 61# c 416'
 7" 23# effec. to 3646'
 (Shoe at 5030')
 C.P. 2760'; WSO 4 h's 3104'*
 J.P. 4 h's 3185'; 3264'; 3498'; 3606'
 Cmt'd. 4 h's 3105'; 3187'; 3499'; 3605'
 G.P. 8 h/ft 3123-3162'
 Reperf. J.P. 4 h/ft 3123-3162'
 Reperf. J.P. 4 h/ft 3130-3170'
 G.P. 8 h/ft 3211-3221'
 G.P. 4 h/ft 3221-3237' (Cmt'd.)
 Reperf. J.P. 4 h/ft 3210-3247'
 G.P. 4 h/ft 3530-3559'
 Reperf. J.P. 4 h/ft 3530-3565'
 Ineffec. Csg. Below Junk (Bdg. Pg.) at 3646'
 and Bdg. Pg. at 3810'

1384'-7" 23# c 5030'

HISTORY RECORD

Sec. 1-8N-33W

1-5/5/56 - GETTY OIL COMPANY
 COMPANY (Pacific Western Oil Corp.) LEASE "Los Alamos" WELL NO. 31
 FIELD-AREA Cat Canyon *West* COUNTY Santa Barbara ELEV.
Plum Creek SPUD. 8/13/55
 LOCATION 5610' Sly alg W ppty/1, 2310' Ely fr NW cor of COMP. 1/24/57
 ppty (Los Alamos Ranch), Sec. 1-8N-33W Rsm. 4/14/65
 DATE OF ISSUE: 5/8/65 supplements issue 2/2/57 *Injection* Waste Water Disposal Well: 5/2/65
 I.D. 5710'
 PLUG 3570'

PIPE RECORD			GEOLOGICAL MARKERS	
SIZE	DEPTH	CMTD.-LDD.	REMARKS	
13 $\frac{3}{8}$	416	*	w/300 sx.	
7	5030	*	w/1700 sx.	
			Perf. at Int: 3123-3559, reperf'd. 3130-3565	
			Prod. Int: 3111-3565 selectively	
DATE	DEPTH	FORMATION - REMARKS		
9/23/55	5710	On pump 9/23/55- no estimate.		
10/7/55		Suspended.		
1/25/57	5710	Recompleted 1/24/57-		
1/28/57	Pg3400	201 B/D gross, 60 B/D net, intervals 3111-50, 3199-3225, 3247-3318'.		
2/5/57		24 B/D net 10.2° 87% cut 280% C.P. - 2/5/57 all water		
4/16/65	5710	121 B/D gross, 8 B/D net, 96% cut.		
4/19/65	Pg3400	Resumed 4/14/65. Circulated out sand fill 3120-75'.		
	5710	Cleaning out bridge plug to convert to Waste Water Disposal Well.		
4/20/65		Drilled out retainer at 3175'. Bailed sand and gravel		
4/21/65		to 3185'. Back scuttled to 3214'. Pipe stuck. Ran impression		
4/22/65		block. Perf'd. at intervals 3123-3559'.		
4/23/65	5710	Milled 3202-3226'.		
4/26/65	Pg3570	Cleaned out to 3260'.		
4/27/65		Drilled out cement, sand and gravel 3260-3412'.		
4/28/65		Drilled and cleaned out to 3570'. Ran casing scraper to 3570'.		
4/29/65		Washed perfs. 3211-37 and 3530-59'. Acidized.		
4/30/65		Jet perf'd. w/ 4 $\frac{1}{2}$ " HPF at intervals 3130-3565. Washed 3130-3237'.		
5/3/65		Hit fill at 3500'. Circulating out sand.		
		Backscuttled out sand fill 3500-3579'. Washed perfs. 3530-67'.		
		Closed in well.		
		Bailed to 3570'. Moving out equipment.		
		Installing waste water line.		
		Completed as a Waste Water Disposal Well 5/2/65.		
		Dropped from Oilgram.		

PAGE 27

DIVISION OF OIL AND GAS
RECEIVED

NOV 8 1965

SANTA ANA, CALIFORNIA

Water Injection
approx. 1000 BWPD - 1050' PSM

UNSCHEDULED

E R MURRAY-AARON

May 6, 1964

WASTE WATER DISPOSAL
CAT CANYON FIELD

Santa Maria

I am enclosing three copies of report No. P365-275 dated May 6, 1965, approving proposal of Getty Oil Company to convert well No. "Los Alamos" 31, Sec. 1, T. 8 N., R. 33 W., S.B.B. & M., Cat Canyon field into a waste water disposal well. I am enclosing copy of a letter from the operator outlining the proposed work and copy of a cross section and contour map showing the structural location of the well.

Wastewater will be injected into the S6, S6A, and S9 sand members of the Sisquoc zone. The anticipated rate will be 1,000 to 1,500 barrels per day at pressures ranging up to 500 psi. The base of the fresh water sands is above 600 feet and these sands are adequately protected by a string of surface casing cemented at 416 feet and by a collar of cement behind the 7" water string above the injection zone. A water shut-off above the injection zone has been established.

Cecil L Barton

CECIL L BARTON
Deputy Supervisor

CLB:db

Encl.

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 365-275

Mr. J E Hofmann
P O Box 811
Ventura Calif
Agent for CENNY OIL CO

Santa Maria Calif.
May 6 1965

WATER FLOOD
S6-S9

DEAR SIR:

Your 1 8 H. proposal to alter casing Well No. "Los Alamos" 31
Section 1, T. 8 N., R. 33 W., S. B. B. & M., Cat Canyon Field, Santa Barbara County,
dated April 12, 1965, received April 13, 1965, has been examined in conjunction with records filed in this office.
Present conditions as shown by the records and the proposal are as follows:
The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Total depth. 5710'; Pg. 3192'
2. Complete casing record, including plugs:
13 3/8" 61' c 416'; 7" 23' effec. to 3192'; C.P. 2760'; WSO 3101';
J.P. h h's 3185'; J.P. h h's 3185'; 3187' Cmtd.; G.P. h h/ft
3123-3162'; Ineffective Casing Below Cement Plug at 3192'
1638-7" c 5030'; Baker Model K Cast Iron Retainer 3197'; J.P. h h's
3264'; G.P. h h/ft 3211-3237'; Baker Cast Iron Bridge Plug 3412';
J.P. h h's 3498'; & 3606'; J.P. h h's 3499'; 3605' Cmtd.; G.P.
h h/ft 3530-3559'; Baker Reg. Bridge Plug 3646'; Baker Cast Iron
Bridge Plug 3812'; J.P. h h's 4862' WSO; 698-5 1/2" 17' L 5705'; Pf:
4135-5687' (180 W, 2" slots, 12 r, 6" c); TIR 5007'.
3. Last produced. Idled since January 1958."

PROPOSAL:

"The proposed work is as follows: RECOMPLETE AS AN INJECTION WELL IN S6-S9 BONES

1. Cleanout to bridge plug at 3646'. (If there is cement above plug, clean out to 3570').
2. Wash perfs. 3123-3559' (at intervals) and reperf. if necessary.
3. Wash intervals with 1000 gallons Corrosion Controls 15% HCl premixed with 3% Hydrofluoric acid.
4. Run tubing to 3100' and begin displacing lease salt water to formation."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. A monthly statement shall be filed with this Division, in duplicate, on our Form 110B showing the amount of fluid injected, pressure required, and source of injected water.
2. Injection shall cease if any evidence of damage or failure of water shut-off is observed, or upon written notice from this Division.

E. R. MURRAY-AARON, State Oil and Gas Supervisor

By continued on page 2, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 365-275

GETTY OIL CO

Company

Page 2

Well No. "Los Alamos" 31, Section 1, T. 8 N., R. 33 W., S. E. B. & M.,

- NOTE: 1. Location of Well: 5610' S'ly along W. property line, thence 2310' E'ly at right angles from NW corner of Los Alamos Ranch, or approximately 550' S., and 3150' E. from the NW corner of Sec. 1, T. 8 N., R. 33 W., S.E.B. & M.
2. Base of the fresh-water sands is above 600'.
3. The fresh-water sands are adequately protected by a collar of cement behind the 7" casing above the injection zone.
4. The injection water will be waste water produced from various zones in Cat Canyon field.

Map No.	Map Letter	Bond No.	Forms		
			115	114	121
			5610 5		

Blanket bond

CLB:ms
cc E R Murray-Aaron (3)

E. R. MURRAY-AARON, State Oil and Gas Supervisor

By Cliff L. Bastian, Deputy

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1006

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Ventura, Calif. April 12, 19 65

DIVISION OF OIL AND GAS - SANTA MARIA

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. Los Alamos No. 31
(Cross out unnecessary words)

Sec. 1, T. 8N, R. 33W, S.B. B. & M.
Cat Canyon Field, Santa Barbara County.

The present condition of the well is as follows:

1. Total depth. 5710'; Pg. 3192'
2. Complete casing record, including plugs:
13 3/8" 61# c 416'; 7" 23# effec. to 3192'; C.P. 2760'; WSO 3104'; J.P. 4 h's 3185'; J.P. 4 h's 3105'; 3187' Cmtd.; G.P. 4 h/ft 3123-3162'; Ineffective Casing Below Cement Plug at 3192'
1838-7" c 5030'; Baker Model K Cast Iron Retainer 3197'; J.P. 4 h's 3264'; G.P. 4 h/ft 3211-3237'; Baker Cast Iron Bridge Plug 3412'; J.P. 4 h's 3498'; & 3606'; J.P. 4 h's 3499', 3605' Cmtd.; G.P. 4 h/ft 3530-3559'; Baker Mag. Bridge Plug 3646'; Baker Cast Iron Bridge Plug 3812'; J.P. 4 h's 4862' WSO; 698- 5 1/2" 17# L 5705'; Pf: 5135-5687' (180 M, 2" slots, 12 r, 6" c); TLH 5007'

3. Last produced. Idled since January 1958
(Date) (Oil, B/D) (Water, B/D) (Gas Mcf/D)

The proposed work is as follows: RECOMPLETE AS AN INJECTION WELL IN S6-S9 ZONES

1. Cleanout to bridge plug at 3646'. (If there is cement above plug, clean out to 3570').
2. Wash perms. 3123-3559' (at intervals) and reperf. if necessary.
3. Wash intervals with 1000 gallons Corrosion Controls 15% HCl premixed with 3% Hydrofluoric acid.
4. Run tubing to 3100' and begin displacing lease salt water to formation.

Map No.	Map Letter	Bond No.	Forms		
			116	114	121
				56	4-13-65

DIVISION OF OIL AND GAS
RECEIVED

APR 13 1965

SANTA MARIA, CALIFORNIA

P.O. Box #811, Ventura, Calif.

(Address)

643-2154

(Telephone No.)

GETTY OIL COMPANY (TIDEWATER OIL CO.-OPERATOR)

(Name of Operator)

By

J. E. HOFMANN, Agent

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

23

Bond No.	Bond Letter	Bond No.	Forma		
			110	114	121
4-13-57					

Producing - 2-16-57

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

SANTA PAULA, CALIFORNIA

OPERATOR Getty Oil Co.
Tidewater Oil Company FIELD Cat Canyon ✓
 Well No. Getty Oil Co.'s Los Alamos #31, Sec. 1, T. 8 N, R. 33 W, S.B. & M.
 Date April 5, 1957, 19____ Signed J. P. McCabe
J. P. McCabe
P.O. Box 811, Ventura Miller 3-2154 Title Superintendent
 (Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

Reason for well work: Plug back and perforate.
 Production before well work : None. (Well never put on production).

History

1957

1/11

Rigged up hoist to plug and perforate. Set Baker cast iron bridge plug at 3812'. Dumped 5 sax cement on top. Calc. top of cement 3785'.

1/12

Ran Lane Wells neutron log and collar locator. Jet perforated 4 holes 3605'. Ran J.C.T. on 2 7/8" tubing with no cushion and 3/4" bean. Set packer at 3577' with perf. tail to 3591'. Opened valve at 4:50 P.M. Had light steady blow 1 1/2 hours and light heading blow for balance of 2 hour test. Pulled loose at 6:50 P.M. Recovered 46 stands salt water, 180 g/g.

1/13

Ran M&T shoe squeeze tool on 2 7/8" tubing. Set below holes at 3605' and tested plug with 2000 psi O.K. Set tool at 3461'. Holes at 3605' took fluid at 12 cu.f. per minute at 1200 psi. Mixed 20 sax cement and tool unset. Backscuttled. Reset tool. Mixed 180 sax construction cement. Preceded cement with 11 cu.ft. diesel oil and 20 cu.ft. water. Displaced cement with 10 cu.ft. water and 123 cu.ft. oil. M.P. 1300 psi. F.P. 950 psi. Cement in place 6:10 P.M. HOWCO. Standing cemented. Found top of cement 3530'. Cleaned out to 3607' and circulated down to 3662'. Pressure tested 7" casing with 950# for 15 min. O.K. Jet perforated 4 holes 3606'. Ran J.C.T. on 2 7/8" tubing with 3/4" bean and no cushion. Set packer at 3574' with perf. tail to 3587'. Opened valve at 7:05 P.M. Had weak 1 hr. blow then heading blow balance of 1 hr. 36 min. test. Pulled loose at 8:41 P.M. Recovered 300' (1.7 bbls.) oil. (Casing is full of oil.) Charts O.K. Jet perforated 4 holes at 3499. Running J.C.T.

1/15

Ran J.C.T. on 2 7/8" tubing with 3/4" bean and no cushion. Set packer at 3461' with perf. tail to 3476' to test holes at 3499'. Opened valve at 1:12 A.M. Had medium steady blow 40 min. decreasing to light heading blow for balance of 1 hr. 51 min. test. Pulled loose at 3:03 A.M. Recovered 46 1/2 stands rise consisting of 4 1/2 stands oil and 42 stands muddy water, 438 g/g. Charts showed 1080# pressure increase. Ran M&T shoe squeeze tool. Set at 3399'. Pumped out fluid at 14 cu.ft. per min. at 1400#. Mixed 200 sax PCC. Preceded cement with 11 cu.ft. K.D. and 20 cu.ft. water. Displaced cement with 10 cu.ft. water and 115 cu.ft. oil. M.P. 1600#, F.P. 800#. Cement in place 1:20 P.M. HOWCO. Ran bit and scraper. Found top of cement 3431'. Cleaning out.

Map No.	Map Letter	Bond No.	Forms		
			115	114	121
					4-11-51 2

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APR 11 1957

Los Alamos 1431
Page 2.

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April 5, 1957.

SANTA MARIA, CALIFORNIA

- 1/16 Cleaned out cement to 3526'. Pressure tested holes at 3499' with 1000# for 15 min. O.K. With Lane Wells equipment jet perforated 4 holes at 3498'. Ran J.C.T. on 2 7/8" tubing with 3/4" bean and no cushion. Set packer at 3447' with perf. tail to 3461'. Opened tester at 12:27 P.M. Had medium 5 min. blow decreasing to light steady blow for balance of 1 hr. 25 min. test. Pulled loose at 1:52 P.M. Recovered 90' rise drilling oil. Charts O.K. Jet perforated 4 holes 3264'. Ran J.C.T. as before. Set packer at 3218' with perf. tail to 3232'. Opened tester at 4:30 P.M. Had medium 3 min. blow then light steady blow remainder of 1 hr. 20 min. test. Pulled loose at 5:50 P.M. Recovered 765' rise (4.4 bbls.) oil. No free water. Sample cut 6.0% mud and 24.0% water by centrifuge. Charts showed 200# pressure increase. Jet perforated 4 holes 3105'. Ran J.C.T. Tool failed to open. Pulled. Rerunning same.
- 1/17 Reran J.C.T. (straddle type) on 2 7/8" tubing with 3/4" bean and no cushion. Set packers at 3071' and 3129' to test holes at 3105'. Opened tester at 2:48 A.M. Had light steady blow throughout 2 hr. test. Pulled loose at 4:48 A.M. Recovered 914' (5.3 bbl.) rise consisting of 1.8 bbls. drilling oil and 3.5 bbls. muddy water, 250 g/g. Charts showed 250# pressure increase. WNSO. Set Baker MK Magnesium Bdg. Pg. at 3212'. Ran M&T shoe squeeze tool. Tested bdg. pg. with 1500 psi. Set tool at 2990'. Pumped out fluid at 1 1/4 cu.ft./min. at 1300#. Mixed 200 sax PCC. Preceded cement with 11 cu.ft. K.D. and 20 cu.ft. water. Displaced cement with 10 cu.ft. water and 107 cu.ft. oil. M.P. 1500#. F.P. 600#. Cement in place 5:15 P.M. HOWCO. Standing cemented.
- 1/18 Found top of cement at 3062'. Cleaned out cement to 3145'. Pressure tested casing. Took fluid at 850#. Ran M&T shoe squeeze tool. Tested bdg. pg. at 3212' with 1500#. Set tool at 2990'. Pumped oil out holes at 3105' at 1 1/4 cu.ft./min. at 1500#. Mixed 200 sax PCC. Preceded cement with 11 cu.ft. K.D. and 20 cu.ft. water. Displaced cement with 10 cu.ft. water and 107 cu.ft. oil. Left 11 sax cement in casing. M.P. 1500#, F.P. 500#. Cement in place 2:25 P.M. HOWCO. Standing cemented.
- 1/19 Found top of cement 3063'. Cleaned out to 3110'. Pressure tested casing. Holes at 3105' apparently took fluid at 950#. Cleaned out to 3140'. Ran M&T shoe squeeze tool. Tested bridge plug at 3212' with 1500#. Set tool at 2990'. Tested below tool with 1000#. Held 900# for 20 min. O.K. Tested casing from tool to surface with 1000# O.K. Pulled tool. Jet perforated 4 holes at 3104'. Ran J.C.T. as before. Set packer at 3068' with perf. tail to 3082'. Opened valve at 9:08 P.M. Had light to faint steady blow throughout 1 hr. 5 1/4 min. test. Pulled loose at 11:02 P.M. Recovered 190' (1.1 bbls.) rise of drilling oil. Charts O.K. WSO on holes at 3104' witnessed and approved by D.O.G.
- 1/20 Ran bit and scraper. Drilled on bridge plug at 3212' and chased plug to 3646'. swabbed fluid level to 1512'. With Lane Wells equipment, gun perforated 4 h/ft. 3530'-3559'. Had 600' fluid rise while perforating. Ran J.C.T. on 2 7/8" tubing with 3/4" bean and no cushion. Set packer at 3477' with perf. tail to 3491'. Opened tester at 8:45 P.M. Had medium to light blow for 35 min. then dead for balance of 2 hr. 12 min. test. Pulled loose at 10:57 P.M. Had 2810' (16.3 bbls.) rise salt water, 583 g/g. No oil. Charts showed 600# increase during test.
- 1/21 Set Baker cast iron bridge plug at 3412'. Swabbed fluid down to 1500'. Dumped 5 sax cement on top of bridge plug. Calc. top of plug 3385'. G.P. 4 h/ft. 3237'-3211', 3162'-3123'. Ran and landed 3287.6' - 2 7/8" tubing incl. pump shoe and gas anchor.
- 1/22 Ran pump and rods. Hooked up pumping unit. Started pumping 2:20 P.M. Turned to tank 2:40 P.M. In 4 hours and 40 min. to 7:20 P.M. pumped 46 bbls. circ. oil, 4 1/4" stroke, 16 SPM. Having trouble with unit. Shut in at 7:20 P.M.

APR 11 1957

April 5, 1957.

SANTA MARIA, CALIFORNIA

- 1/23 Pulled pump - sanded. Cleaned and reran pump. Pumped 85 B/D gross formation oil, 37.5% water.
- 1/24-29 Pumped at a daily average rate of 189 barrels, cutting 72.6%.
- 1/30-2/1 Shut in, waiting on hoist for pump repair.
- 2/2 Lowered tubing, hit top of fill at 3373'. Changed pump shoe and seat. Landed tubing at 3004'. Pumped 148 B/16 hours, 92% cut.
- 2/3-5 Pumped at a daily average rate of 203 B/D, 92% cut.
- 2/6 No gauge. Ran water witch. Found water entry 3223'-3225', 135-140 barrels per day.
- 2/7 Fluid level 1685'. Pulled rods and tubing. Preparing to exclude water.
- 2/8 Ran M&T shoe squeeze tool. Set at 3277'. Tested plug with 1000# O.K. Set at 3247'. Had communication between holes at 3264' and perforations above tool. Ran Baker MK magnesium retainer. Set at 3245'. Mixed 25 sax construction cement. Pumped 21 sacks below tool. Cement in place 8:20 A.M. Backed off from retainer and pulled tubing. Well taking fluid. Ran bit and scraper. Found top of cement at 3227'.
- 2/9 Ran Baker MK magnesium retainer. Slips set at 2031'. Backed off. Ran bit and scraper. Drilled out retainer and cleaned out cement 3227'-3237'.
- 2/10 Ran Baker MK magnesium retainer. Set at 3177'. Pumped away fluid at 20 cu.ft./min. at 1000#. No returns through perfs. at 3123'-3162'. Pumped in 100 sax PCC. Displaced with 108 cu.ft. water. Got returns from casing after displacing 104 cu.ft. Left 10 sax in casing. M.P. 500#, F.P. 0#. Cement in place 3:35 A.M. HOWCO. Found top of cement 2970'. Cleaned out cement and retainer to 3221'.
- 2/11 With Lane Wells equipment jet perforated 4 h/ft. 3211'-3221'. Ran J.C.T. on 2 7/8" tubing with no cushion and 1/2" bean. Set packer at 3179' with perf. tail to 3194'. Opened tester at 8:50 A.M. Had strong 3 min. blow decreasing to light steady blow. Started swabbing at 10:50 A.M. Fluid level at 1100' on first run. In 13 hours 10 min. to midnight swabbed 100 bbls. total including 7 1/2 barrels oil and 5 barrels sand. Swabbing from 2900'. Fluid level approximately 2700'.
- 2/12 Swabbed salt water, oil and sand. In 19 hrs. 40 min. swabbed total of 113 barrels including 9 barrels oil. Pulled tester at 9:20 A.M. Ran bit and scraper and circulated hole clean to 3221'. Running cement retainer.
- 2/13 Set Baker MK cast iron retainer at 3197'. Pumped fluid away at 20 cu.ft. per minute at 600#. No returns from casing. Pumped in 75 sax PCC. Displaced with 96 cu.ft. water. Left 12 cu.ft. cement on top of retainer. M.P. 1000#. F.P. 0#. Cement in place 12:50 A.M. HOWCO. Ran bit and scraper. Cleaned out cement 3171'-3192'. J.P. 4 holes 3187'. Ran J.C.T. with no cushion and 1/2" bean. Set packer at 3172' with perf. tail to 3186'. Opened tester at 3:20 P.M. Had medium to light blow 5 min. then fluid dropped away in annulus. Pulled loose and refilled casing with 1/2 barrel water. Set packer at 3099'. Opened at 3:52 P.M. Had light steady blow. Started swabbing at 7:30 P.M. Fluid level 1880'. Swabbed 12 barrels salt water to 10:30 P.M. No oil. Fluid level 2560'. Pulled loose at 11:00 P.M. Pulling tester.
- 2/14 Plug 3192'. Pulled tester. Set Baker MK magnesium retainer at 3177'. Pumped fluid away at 1000#. Opened annulus and had communications between 3187' and interval 3123'-3162'. Left annulus open. Pumped in 25 sax PCC. Displaced with 97 cu.ft. water. Left 8 sax on top of retainer. Circulating pressure 1000#. Cement in place 7:00 A.M. HOWCO. Found top of cement 3105'. Cleaned out to 3192'. Jet perf. 4 holes 3185'. Running J.C.T.

Los Alamos #31
Page 4.

-4- APR 11 1957

April 5, 1957.

SANTA MARIA, CALIFORNIA

- 2/15 Ran J.C.T. to test holes at 3185' with perf. tail to 3189'. Opened tester at 2:06 A.M. Had light blow for 1 minute and then dead for balance of 1 hour test. Pulled loose at 3:06 A.M. Recovered 440' rise (2.5 bbls.) salt water. Reran tester as before. Opened tester at 7:45 A.M. Had light blow for 5 minutes and then dead balance of 2 hour test. Pulled loose at 9:45 A.M. Recovered 90' rise salt water. (Hole full of salt water). Charts O.K. With Lane Wells equipment J.P. (reperf.) 4 h/ft. 3123'-3162'. Hung 2 7/8" tubing with pump shoe and gas anchor at 3061'. Ran pump and rods. Started pumping 1:00 A.M. In 6 1/2 hours pumped 66 barrels water (circulating fluid).
- 2/16-21 Pumping to sump due to high sand cut. Est. producing rate of 150 B/D, 64% cut.

	<u>Gross</u>	<u>Net</u>	<u>Cut</u>	<u>Casing Press.</u>	
3/6	162	36	78 %	160#	T.D. 5710'
3/14	123	27	78	165	
3/17	103	23	78	165	Pg. 3192'

TUBING RECORD

- 3027.5' - 2 7/8" EU Tubing Rg. 2, 8 RT (96 jts.)
 1.6' - 2 1/2" Top lock pump shoe
31.9' - Gas Anchor
- 3061.0' - Overall from landing flange (12' below K.B.)

JUNK

Part of Baker MK magnesium bridge plug at 3646'.

CASING RECORD

- 13 3/8" 61# c 416'
 7" 23# c 5030'
 C.P. 2760'
 4 h 3105', 3187', 3199',
 3605' (cmtd.)
 4 h 3104', 3185', 3264',
 3198', 3606'
 8 h/ft. 3123'-3162'
 (8 h/ft. 3211'-3221'
 Ineff. (4 h/ft. 3221'-3237',
 (3530'-3559'

JH:ml

Map Letter	Bond No.	Forms		
		115	114	121
				4-11-57 5

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STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T 357-11

Mr. J P McCabe
P O Box 811
Ventura California
Agent for Getty Oil Co

Santa Maria, Calif.
January 22, 1957

DEAR SIR:

Your well No. "Los Alamos" 31, Sec. 1, T. 8 N., R. 33 W., S.B. B & M. Cat Canyon Field, in Santa Barbara County, was tested for water shut-off on January 19, 1957. Mr. Eugene D. Lawrence, designated by the supervisor was present from 11:00 p.m. to 12:00 p.m. as prescribed by law; there were also present Fred Hagist, engineer, and F. Salsberry, driller. Shut-off data: 7 in. 23 lb. casing was re-cemented through perforations at 3093 ft. on January 18, 1957 in an 11 3/4 in. hole with 227 cu. ft. sacks of cement

calculated to fill behind casing to - - - - - ft. below surface. Casing record of well: 13 3/8" cem. 416'; 7" cem. 5030', c.p. 2760', four 1/2" holes 4862', W.S.O., c.p. 3093', four 1/2" holes 3092', W.S.O.; 5 1/2" ld. 5007'-5705'. Perf.: 5135'-5687'. Plugged with a cast iron bridge plug 3800', with cement 3800'-3772', with a magnesium bridge plug 3200'.

Present depth 5710 ft. cmt. bridge 3200 ft. to 3133 ft. Cleaned out cmt. 3050 ft. to 3133 ft. for test. A Combination gun and tester was run into the hole on 2 7/8 in. drill pipe tubing, with - ft. of water-mud cushion, and packer set at 3056 ft. with tailpiece to 3070 ft. Tester valve, with 3/4 in. bean, was open for 1 hr. and 52 min. During this interval there was a light steady blow for 40 minutes, decreasing to a faint blow thereafter.

Mr. F. Hagist reported:

Engineer Eugene Lawrence visited the well from 5:00 a.m. to 6:00 a.m. on January 17, 1957. Mr. F. Hagist reported:

1. The hole was bridged at 3800' with a Baker cast iron bridge plug.
2. On January 16, 1957, 5 sacks of cement was dumped in the hole beginning at 3800' calculated to fill to 3772'.
3. The 7" casing was shot-perforated with four 1/2" holes at 3093'.
4. A Straddle tester was run and the tool plugged immediately after it was opened.
5. A Straddle tester was run into the hole on 2 7/8" drill tubing and packers set at 3059' and 3117'.
6. The tester valve, with 3/4" bean, was open for two hours. During this interval there was a light steady blow for 50 minutes, a medium blow for 20 minutes, and a light steady blow thereafter.

The inspector noted the following:

1. When the drill pipe was removed, 346' of oil, and 598' of water were found above the tester, equivalent to 5.3 bbl.
2. The pressure bomb charts indicated that the tester functioned properly.

The Engineer arrived at the well at 11:00 p.m., January 19, 1957, and Mr. Hagist reported:

E. H. MUSSER
State Oil and Gas Supervisor

By (Continued) Deputy

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DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
OR
Special Report on Operations Witnessed

No. T 357-11

Page 2

Getty Oil Co

Well No. "Los Alamos" 31, Sec. 1, T. 8 N., R. 33 W., S. B. B. & M.,

1. The hole was bridged at 3200' with a magnesium bridge plug.
2. On January 18, 1957, the 7" casing was recemented through perforations at 3093' with 227 sacks of cement, of which 200 sacks was squeezed away under a final pressure of 500 lb.
3. The 7" casing was shot-perforated with four 1/2" holes at 3092'.

The inspector noted the following:

1. When the drill pipe was removed, 190' of oil was found above the tester, equivalent to 1.3 bbl.
2. The pressure bomb charts indicated that the tester functioned properly.

THE 7" SHUT-OFF AT 3092' IS APPROVED.

CC: Mr D D Turner

E. H. MUSSER

State Oil and Gas Supervisor

By Wm C. Burt Deputy

Map No.	Map Letter	Bond No.	Forms		
			115	114	121
			115-57		

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P357-23

Mr. J P McCabe

P O Box 811

Ventura California

Agent for Getty Oil Company

Santa Maria, Calif.

January 14, 1957

DEAR SIR:

Your proposal to alter casing Well No. "Los Alamos" 31

Section 1, T. 8N., R. 33W., S. B. B. & M., Cat Canyon Field, Santa Barbara County,

dated Jan. 11, 1957, received Jan. 14, 1957, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

Records in addition to, or at variance with those shown in the notice:

The 7" casing cemented 5030', c.p. 2760'.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Total depth. 5710'
2. Complete casing record.
13 3/8" 61# c 416'
7" 23# c 5030' 4 h 4862' (WSO)
698' - 5 1/2" 17# L 5705'
T.L.H. 5007'
Perf. (5135'-5687') 180 M, 2" slots, 12 rows, 6" centers.
3. Last produced. Never produced.
(Date) (Net Oil) (Gravity) (Cut)"

PROPOSAL:

"The proposed work is as follows:

1. Set bridge plug at 3800'. Dump 5 sax of cement on plug.
2. Jet perforate 4 holes at 3585'. Test with casing tester. Recement, reperforate and retest, if necessary.
3. Jet perforate and make tests as above at 3515', 3260' and 3115'. WSO at 3115' to be witnessed and approved by DOG.
4. Gun perforate 4 holes per ft. and test interval 3530'-3560'.
5. If wet, abandon by setting bridge plug at 3400' and dump 5 sax cement on plug.
6. Gun perforate 4 holes per ft. 3135'-3165', 3212'-3245'.
7. Run tubing, pump and rods and place well on production."

DECISION:

THE PROPOSAL IS APPROVED.

Blanket bond

Map No.	Map Letter	Diagram No.	Form
		115	114
		116	121

1-14-57
m

E. H. MUSSER, State Oil and Gas Supervisor

By John C. Barker, Deputy

15

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
RECEIVED

JAN 14 1957

DIVISION OF OIL AND GAS

SANTA MARIA, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Ventura

Calif.

January 11

1957

DIVISION OF OIL AND GAS

Santa Maria

Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. Los Alamos #31
(Cross out unnecessary words)

, Sec. 1 ✓, T. 8 N ✓, R. 33 W ✓

, S.B. & M.

Cat Canyon ✓

Field,

Santa Barbara ✓

County.

The present condition of the well is as follows:

1. Total depth.

5710'

2. Complete casing record.

13 3/8" 61# c 416'

7" 23# c 5030' 4 h 4862' (WSO)

698' - 5 1/2" 17# L 5705'

T.L.H. 5007'

Perf. (5135'-5687') 180 M, 2" slots,
12 rows, 6" centers.3. Last produced. Never produced.

(Date)

(Net Oil)

(Gravity)

(Cut)

The proposed work is as follows:

1. Set bridge plug at 3800'. Dump 5 sax of cement on plug.
2. Jet perforate 4 holes at 3585'. Test with casing tester. Recement, reperforate and retest, if necessary.
3. Jet perforate and make tests as above at 3515', 3260' and 3115'. WSO at 3115' to be witnessed and approved by DOG.
4. Gun perforate 4 holes per ft. and test interval 3530'-3560'.
5. If wet, abandon by setting bridge plug at 3400' and dump 5 sax cement on plug.
6. Gun perforate 4 holes per ft. 3135'-3165', 3212'-3245'.
7. Run tubing, pump and rods and place well on production.

Map No.	Map Letter	Bond No.	115	114	121
		B		1-4-57 m	1-14-57 m

Tidewater Oil Company

(Name of Operator)

By

J. P. McCabe, Superintendent

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

14

Map No.	Map Letter	Bond No.	Forms		
			115	114	121

~~Producing - Commenced August 23, 1955~~

Suspended

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
FEB 1 - 1956

WELL SUMMARY REPORT

SANTA MARIA, CALIFORNIA

Operator Pacific Western Oil Corporation ✓ Field Cat Canyon ✓
 Well No. "Los Alamos" #31 Sec. 1, T. 8N, R. 33W, S.E.B. & M. 1077' feet.
 Location 5610' S. from NW corner of Los Alamos Ranch, thence 2310' E. at right angles. which is 11 feet above ground. All depth measurements taken from top of K.B.

In compliance with the provisions of Chapter 93, Statutes of 1939, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date _____

Signed [Signature]

Title _____

(Engineer or Geologist)

(Superintendent)

(President, Secretary or Agent)

Commenced drilling 8/13/55 Completed drilling 8/19/55 Drilling tools Rotary

Total depth 5710' Plugged depth _____ GEOLOGICAL MARKERS DEPTH

Junk _____

Commenced producing 8/23/55 (days) Starting gas lift pumping (cross out unnecessary words)

Initial production
Production after 30 days

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
wash	oil				

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cement through cement
13-3/8"	416'	0	61#	New	Smless	J-55	17 1/2"	300	
7"	5030'	0	23#	German	Smless	J-55	8 1/2"	1700	
5 1/2"	5705'	5007	17#	New	Smless	J-55	-	-	

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
5 1/2"	5687 ft.	5135 ft.	180 mesh - 2" slots	12	6"	Machine
7"	ft.	4862 ft.	W.S.O.			
	ft.					
	ft.					

Map No.	Map Letter	Bond No.	Form 118	Form 114	Form 121

Electrical Log Depths 115-5696' (Attach Copy of Log)

DIVISION OF OIL AND GAS

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FEB 1 - 1956

LOG AND CORE RECORD OF OIL OR GAS WELL

SANTA MARIA, CALIFORNIA

OPERATOR Pacific Western Oil Corporation FIELD Cat Canyon

WELL NO. Los Alamos #31 SEC 1 T. 8N R. 33W S. BB & M

FORMATIONS PENETRATED BY WELL

DEPTH 10'		THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
Top of Formation	Bottom of Formation				
0	5465	5465	Drilled		Electric log submitted in lieu of drillers log.
5465	5475	10'	Cored	10'	Core No. 1: 10' Shale gray, very hard, massive with local fractured portions, no dip. Local cherty portions in fractured parts showing tarry residual oil.
5700	5710	10'	Cored	10'	Core No. 2: 9' Shale as above.

(11)

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FEB 1 - 1956

HISTORY OF OIL OR GAS WELL

SANTA MARIA, CALIFORNIA

OPERATOR Pacific Western Oil Corporation ✓ FIELD Cat Canyon ✓WELL NO. "Los Alamos" #31 SEC 1 T. 8N R. 33W E. B. B & MSIGNED *W. J. Smith*DATE _____ TITLE _____
(President, Secretary or Agent)

DATE	
8/13/55	Clyde Hall Drilling Company moved in, rigged up and spudded a 12 $\frac{1}{4}$ " hole at 8 PM 8/13/55 and drilled to 420'. Opened 12 $\frac{1}{4}$ " hole to 17 $\frac{1}{2}$ " from 0-418'.
8/14/55	13-3/8" casing cemented at 416'. Made up and ran 12 joints (423') of 13-3/8", 72# casing with Baker guide shoe on bottom. Byron Jackson cementers mixed and pumped in 300 sacks construction cement (118# slurry, 2% calcium chloride). One bottom and one top wood plugs were used. Started cementing at 1:53 AM. Plugs bumped @ 2:25 AM. Held 400# pressure for 3 hours. Casing set at 416'. Tested blow out equipment for 15 minutes with 1500# pressure. Held OK. Ran 12 $\frac{1}{4}$ " bit, drilled out plug at 414', shoe at 416' and drilled ahead to 691'.
8/17/55	With 12 $\frac{1}{4}$ " bit drilled ahead from 691-2409'. Ran 11-3/4" bit and reduced hole from 2409-3400'.
8/18/55 to 9/1/55	Drilled with 10-5/8" from 3400-5008'. Reduced hole from 10-5/8" to 8 $\frac{1}{2}$ " from 5008-5328'; twisted off and recovered fish.
9/3/55	Drilled 8 $\frac{1}{2}$ " from 5328-5465'.
9/4/55	With Christenson 8-1/4" core equipment, cored the interval 5465-5475' and recovered 10'.
9/5/55	Opened 8 $\frac{1}{4}$ " core hole to 8 $\frac{1}{2}$ " from 5465-5475' and drilled ahead to 5589'.
9/6/55	Drilled 8 $\frac{1}{2}$ " ahead from 5589-5700'. Ran electric log, dipmeter and hole caliper.
9/7/55	Cored as above the interval 5700-5710' and recovered 10'. <u>Attempted formation test.</u> Made up and ran Johnston formation tester on 5456' of 4 $\frac{1}{2}$ ", 16.6# drill pipe. Make up included 2 packers at 5582, 5574', no cushion, Bowen jars, Homco safety joint, $\frac{1}{2}$ " bottom hole bean, 3/4" surface bean, 123' of 6" drill collars, 2 pressure bombs and tail pipe perforated 5582-5710'. Test failed because of wash out in drill collars.
9/8/55	<u>Formation test interval - 5582-5710'.</u> Made up Johnston tester as above at 6:20 PM for 60 minutes on a $\frac{1}{2}$ " bean with a light blow. The blow was light, steady decreasing to faint after 30 minutes and faint heading blows for remainder of test. Recovered 90' of drilling mud. Filtrate tested 61 g.p.g. from sample taken at bottom and the mud tested 41 g.p.g. Difference

DIVISION OF OIL AND GAS

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HISTORY OF OIL OR GAS WELL

SANTA MARIA, CALIFORNIA

OPERATOR Pacific Western Oil Corporation FIELD Cat Canyon
WELL NO. "Los Alamos" #31 SEC. 1 T. 8N R. 33W S. B. B & M

SIGNED *W. J. Scott*
TITLE _____
(President, Secretary or Agent)

DATE _____

DATE	
	(continued)
	in salinity possibly due to error in titration. Initial Hydrostatic pressure 3000#. Final hydrostatic pressure 2960#. Initial flow pressure 150#. Final flow pressure 160#.
9/9/55	<u>7" casing cemented at 5030'.</u> Made up and ran 159 joints (5034.30') of 7", J-55, 23#, short T&C, German casing. Casing dressed with Baker triplex shoe, slip on metal petal basket @ 5025', baffel collar at 4994' and centralizers at 5015', 4964', 4900', 4838', 4777', 4715', 2467', 2404', 2341', 2278', 2215', and 2152'. Halliburton cements mixed and pumped in the equivalent of 1700 sacks (615 sacks modified premixed with 1213 cu. ft. of Sealite and 25 sacks of gel, followed by 50 sacks type "C" neat cement). Bumped plugs at 7:36 PM with 900#. Bled off OK. Shut in with 1000# for 9½ hours. Ran Schlumberger temperature survey and located top of cement at 2770'.
9/11/55	<u>C.P. through perforations at 2760'.</u> Lane wells shot four (15/32") holes at 2760'. Halliburton mixed and pumped in 350 sacks type "C" treated with 2% calcium chloride through tubing. Displaced with 585 cu. ft. of drilling fluid. Cement in place 6:45 PM. Laid down 4½" drill pipe and picked up 2-7/8" drill pipe. With 6¼" bit located top of cement at 2511'. Cleaned out cement to 2772'. Circulated and hit plugs 4994'.
9/12/55	<u>Inconclusive W.S.O. on perforations at 2760'.</u> Set Johnston tester at 2745' with tail to 2760'. Opened tester at 9:08 for 1 hour. Had light blow for 8 minutes with gradual decrease to faint blow, faint heading blow for 20 minutes. Dead remainder of test. Recovered 1320' of drilling fluid. Upper portion slightly gas cut grading downward to oil and gas cut mud. Bottom very badly gas cut. <u>W.S.O. 4862'.</u> Shot four 3/4" holes at 4862'. Ran tester on 4836' of 2-7/8", 10.4#, drill pipe. Make up included one packer at 4812', no cushion, 1/2" bottom hole bean, 2 pressure bombs, tail pipe perforated 4815'-4821'. Opened tester at 3:25 AM for 65 minutes. The blow was light for 2 minutes, dead for remainder of test. Recovered 220' of slightly gas cut drilling mud. The shut off at 4862' was witnessed and approved by the Division of Oil and Gas.
9/13/55	Ran straddle tool and retested perforations at 2760'. Indications were wet. <u>Squeeze perforations at 2760'.</u> Set model 'K' bridging plug at 2785'. Set model 'K' cement retainer at 2730'.

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FEB 1 - 1956

HISTORY OF OIL OR GAS WELL

SANTA MARIA, CALIFORNIA

OPERATOR Pacific Western Oil Corporation FIELD Cat Canyon

WELL NO. "Los Alamos" #31 SEC 1 T. EN R. 33W S.B. B & M

SIGNED

TITLE

(President, Secretary or Agent)

DATE

DATE

(continued)

9/15/55 Broke formation down and took 15 cu. ft. per minute at 1200#. Squeezed with 40 sacks type "C" cement. Calculated to put 35 sacks into formation. Final pressure 700#. Cement in place at 11:50 AM.

9/15/55 Ran casing scraper and 6 $\frac{1}{4}$ " bit and drilled out retainer and cleaned out cement to 2767'.
Test squeeze on perforations at 2760'.
Made up and ran Johnston tester on 2731' of 2-7/8" drill pipe with one packer at 274' no cushion, Homco safety joint, $\frac{1}{2}$ " bottom hole bean, $\frac{1}{2}$ " surface bean, two pressure bombs and 15' tail. Opened tester at 2:50 PM for 60 minutes. Opened on $\frac{1}{2}$ " bean for 2 $\frac{1}{2}$ minutes with a weak blow and dead rest of test. Recovered 20' of drilling fluid.
With 6 $\frac{1}{4}$ " bit drilled out retainer at 5785', float collar at 5000 and shoe at 5030' and cleaned out to 5710'.

9/16/55 Changed from mud to oil.
Ran 2-7/8" tubing to 5664', changed from mud to oil. Attempted to set production packer at 4935', 4000', 4905' and every 630' while coming out of hole, packer would not hold.

9/17/55 Ran in with 7" scraper and 6 $\frac{1}{4}$ " bit and conditioned hole.

9/18/55 5 $\frac{1}{2}$ " liner landed 5705', top - 5007'.
Made up and ran 17 joints (696.66') of 5 $\frac{1}{2}$ ", 8 rd. th. Collared liner made up as follows: top 126.63' - blank
551.99' - perforated
18.04' - blank
Bottom joint bull nosed. Perforations 180 mesh, 12 rows, 2" slots, 6" centers. Hung with Burns liner hanger.

9/19/55 Laid down drill pipe. Removed blow out preventer. Ran 5475' of 2 $\frac{1}{2}$ " tubing with pump shoe on top of first joint. Rig released 8 AM September 19, 1955.

9/23/55 Put on pump 10:30 AM Sept. 23, 1955.

9/24/55 Pumped wash oil. Pumped off.

9/25/55 to 9/30/55 Ran deptograph, found fluid level at pump shoe. Pulled well. Reran tubing and set packer at 4976'. Pumped in 272 bbls. of hot Los Alamos crude. Pressures 3200-3500#. Pulled packer. Put well on pump Sept. 30, 1955 at 9 PM.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

DIVISION OF OIL AND GAS
RECEIVED
FEB 1 - 1956
SANTA MARIA, CALIFORNIA

OPERATOR Pacific Western Oil Corporation FIELD Cat Canyon

WELL NO. "Los Alamos" #31 SEC. 1 T. 8N R. 33W S.B. B & M

SIGNED

[Signature]

DATE _____

TITLE _____

(President, Secretary or Agent)

DATE	(continued)
10/1/55	Pumped 185 bbls. of wash oil and pumped off.
10/5/55	Pulled and put on pump 8 AM Oct. 5, 1955, would not pump.
10/6/55	Well shut down until future remedial work.

Map No.	Map Letter	Bond No.	Forms		
			118	114	121
					2-1-56 m

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T355-171

Mr. J H Spohn
Box 217, Rte 1
Goleta California
Agent for Pacific Western Oil Corp

Santa Maria Calif.
September 14 19 55

DEAR SIR:

Your well No. "Los Alamos" 31, Sec. 1, T. 8 N., R. 33 W., S.B. B & M.
Cat Canyon Field, in Santa Barbara County, was tested for water shut-off
on September 12, 1955. Mr. W. H. Park, designated by the supervisor was present
from 6:45 p.m. to 7:45 p.m. as prescribed by law; there were also present J. Gearhart, engineer,
and L. Maupin, drilling foreman
Shut-off data: 7 in. 23 lb. casing was re cemented through perforations at 2760 ft.
on September 11, 1955 in 11 3/4 in. hole with 350 cu. ft. sacks of cement
calculated to fill behind casing to - - - ft. below surface.
Casing record of well: 13 3/8" cem. 416'; 7" cem. 5030', c.p. 2760'; four 1/2" holes
4862', W.S.O.

Present depth 5710 ft. cmt. bridge 5030 ft. to 4994 ft. Cleaned out cmt. 2511 ft. to 4994 ft. for test.
A pressure of - lb. was applied to the inside of casing for - min. without loss after cleaning out to - ft.
A Johnston gun and tester was run into the hole on 2 7/8 in. drill pipe tubing,
with - ft. of water-mud cushion, and packer set at 4812 ft. with tailpiece to 4835 ft.
Tester valve, with 1/2 in. bean, was opened at 3:15 p.m. and remained
open for 1 hr. and - min. During this interval there was a light steady blow for one
minute and no blow thereafter.

Mr. - reported: -

Deputy Supervisor, Wm. C. Bailey, and inspector W. F. Huey were present at the well
on September 12, 1955, and Mr. Gearhart reported:

1. A 17 1/2" hole was drilled from the surface to 416', a 12 1/4" hole to 2409', an 11 3/4" hole to 3400', a 10 5/8" hole to 5008' and an 8 1/2" hole to 5710'.
2. On September 9, 1955, the 7" casing was cemented at 5030' with 1700 sacks of cement.
3. A thermometric survey indicated the top of the cement behind the 7" casing to be at 2770'.
4. The 7" casing was gun perforated with four 15/32" holes at 2760'.
5. On September 11, 1955, the 7" casing was recemented through the perforations at 2760' with 350 sacks of cement.
6. On September 12, 1955, a Johnston tester was run to the hole on 2 7/8" drill pipe for a test of water shut-off through the perforations at 2760'.

Deputy Supervisor Baily and inspector Huey noted that the well tested wet.

Inspector Park was present at the well on September 12, 1955, and Mr. Gearhart reported:

1. The 7" casing was perforated with four 1/2" holes at 4862'.
2. All except 600' of the drill pipe was removed and no fluid was recovered.

E. H. MUSSER

State Oil and Gas Supervisor

By (Continued) Deputy

5

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off OR Special Report on Operations Witnessed

No. T 355-171

Page 2

Pacific Western Oil Corp

Well No. "Los Alamos" 31, Sec. 1, T. 8 N., R. 33 W., S.B. B. & M.

The inspector noted the following:

1. When the remainder of the drill pipe was removed, 220' of drilling fluid was found above the tester.
2. The pressure bomb charts indicated that the tester functioned properly.

THE 7" SHUT-OFF AT 4862' IS APPROVED.

CC: Mr W N Craddock
Mr W J Scott

E. H. MUSSER

State Oil and Gas Supervisor

By Wm C. B... Deputy 4

Map No.	Map Letter	Bond No.	Forms		
			115	114	121
			<i>115-65</i> <i>AM</i>		

SPUDDED:
CEMENTED:

DIVISION OF OIL AND GAS
RECEIVED
AUG 17 1955

COUNTY OF SANTA BARBARA
STATE OF CALIFORNIA
Special Report on Oil Operations Witnessed

SANTA MARIA, CALIFORNIA

CEMENTING SURFACE CASING

No. 2165

Santa Maria, Calif., August 14th, 19 55

Mr. W. S. Scott, Assistant Gen. Superintendent
417 So. Hill St.,
Los Angeles, California

Agent for Pacific Western Oil Corporation

Dear Sir:

Operations at your well Los Alamos No. 3 Sec. 1, T. 2N, R. 33W, S. B. B. & M.
West Cat Canyon Oil Field, in Santa Barbara County, were witnessed by
Harold Huntington, representative of the County

on August 14th, 19 55 There was also present Mr. Maupin for Clyde Hall
Drilling Company and Mr. Stine, Engineer for Pacific Western
Oil Corporation.

Casing Record

August 14, 1955 Set and Cemented 418 ft. of 13 3/8 in.
O.D. 61 lb. Used screw joint surface casing.

The operations were performed for the purpose of setting and cementing surface casing.

and the data and conclusions are as follows:

Mr. Stine reported a 17 1/2 in. rotary hole drilled to a depth
of 418 ft.

1. 11:10 p.m. to 1:00 a.m. ran casing.
2. Mud fluid circulated 25 minutes.
3. 1:48 a.m. to 2:00 a.m. 300 sacks of construction cement were pumped into casing by B. J. Service. Theoretical requirements 225 sacks. 1 top and 1 bottom plugs used.
4. 2:08 a.m. to 2:21 a.m. cement was displaced with 362 cu. ft. of mud fluid. Cement return was made before completion of displacement. Final pressure 400 lbs.

Oral approval of cementing procedure is herewith confirmed.

SANTA BARBARA COUNTY OIL WELL INSPECTOR

By Harold Huntington 3

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

D

DIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P. 355-234

Mr. J H Spohn
Box 217 Rte 1
Goleta Calif
Agent for Pacific Western Oil Corp

Santa Maria Calif.
August 4 19 55

DEAR SIR:

Your 33W proposal to drill Well No. "Los Alamos" 31,
Section 1, T. 8 N., R. 32W, S.B.B. & M., Cat Canyon Field, Santa Barbara County,
dated Aug. 3, 19 55, received Aug. 4, 19 55, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"Legal description of lease Approximately 4000 acres in the Los Alamos Ranch
Location of Well: 5610 feet Southerly along West property line and 2310 feet
easterly at right angles to said line from the Northwest corner of property
Elevation of ground above sea level * feet _____ datum.
All depth measurements taken from top of K.B. which is * feet above ground."

PROPOSAL:

"PROPOSED CASING PROGRAM

Size of Csg.	In. A.P.I.	Weight	Grade and Type	Top	Bottom	Cementing Depths
11-3/4"		47#	J-55	0	400	400'
7"		23#	J-55	0	5600	4800'

Intended zone or zones of completion: Chert

It is understood that if changes in this plan become necessary we are to notify you
before running casing."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Mud fluid of sufficient weight and proper consistency to prevent blowouts shall be used in drilling the well and the column of mud fluid shall be maintained to the surface at all times, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be provided and tested before drilling below the shoe of the 11 3/4" casing and maintained ready for use at all times. Controls should be placed at least 50' from the hole.
3. The 7" casing shall be cemented with sufficient cement to fill all the space back of that casing from the cementing point to above the Sisquoc formation.
4. To witness a test of the 7" water shut-off through gun perforations prior to cleaning out below the cementing point.

Map No.	Map Letter	Bond No.	Forms		
			115	114	121
			8-4-55 9		

Blanket bond

CC - W N Craddock
C E Dyer

E. H. MUSSER, State Oil and Gas Supervisor

By Wm. C. Barker, Deputy

S

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 4 - 1955

SANTA MARIA, CALIFORNIA

083-00313

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

Los Angeles

Calif.

August 3,

19 55

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division III, Article 4, Public Resources Code, notice is hereby given that it is our intention to commence the work of drilling well No. "Los Alamos" No. 31 ✓, Sec. 1 ✓, T. 8 N ✓,

R. 32 W ✓, S.B.B. & M., West Cat Canyon ✓ Field, Santa Barbara ✓ County.

Legal description of lease Approximately 4000 acres in the Los Alamos Ranch

(Attach map or plat to scale)

Location of Well: 5610' feet Southerly West property along section line and 2310 feet Easterly at right angles to said line from the Northwest corner of section 32 property section 32

Elevation of ground above sea level * feet * datum.

All depth measurements taken from top of K.B. which is * feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
<u>11-3/4"</u>	<u>47#</u>	<u>J-55</u>	<u>0</u>	<u>400</u>	<u>400'</u>
<u>7"</u>	<u>23#</u>	<u>J-55</u>	<u>0</u>	<u>5600</u>	<u>4800'</u>

Intended zone or zones of completion: Chert

Map No.	Map Letter	Bond No.	Forms		
			115	114	121
<u>2</u>	<u>8-6-55</u>	<u>9</u>		<u>4-54</u>	<u>4-54</u>
<u>WEH</u>				<u>4-9</u>	<u>4-9</u>

It is understood that if changes in this plan become necessary we are to notify you before running casing.

Address 417 South Hill Street

Pacific Western Oil Corporation

Telephone Number Mutual 3271

By W. J. Scott - Ass't General Sup't

SEND ONE COPY OF NOTICE TO DIVISION OFFICE IN DISTRICT WHERE WELL IS LOCATED